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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,564	10/17/2001	Yoram Wasserman	02,647-644	7707

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EXAMINER

MCCROSKY, DAVID J

ART UNIT

PAPER NUMBER

3736

DATE MAILED: 05/09/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,564

Applicant(s)

WASSERMAN, YORAM

Examiner

David J. McCrosky

Art Unit

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) 18,20-22,24,29-31,33,47,48,60 and 61 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,10-13,16,17,19,23,25,28,32,34-42 and 49-59 is/are rejected.
- 7) ☒ Claim(s) 2,8,9,14,15,26,27 and 43-46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of species A and designated claims 1-61 in Paper No. 5 is acknowledged.

Applicant has elected species A and designated claims 1-61 as corresponding to species A. Claims 18, 20-22, 24, 29-31, 33, 47, 48, 60 and 61 are withdrawn from consideration. The claims are not directed to the elected subject matter. Claims 18, 20-22, 24, 29-31, 33, 47, 48, 60 and 61 are directed toward an apparatus and method used for processing measured data representative of a first measured signal and a second measured signal, which correspond with Figure 1F and are not part of species A. Species A is directed to a measured signal having a first and second signal component that are processed, i.e. an oximetry signal from which oxygen saturation and heart rate are determined. Since Applicant has elected species A, claims 18, 20-22, 24, 29-31, 33, 47, 48, 60 and 61 of Applicant's elected claims have been withdrawn since they are not readable on the elected species. See MPEP §821.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Israel on September 13, 2001. It is noted, however, that applicant has not filed a certified copy of the Israeli application as required by 35 U.S.C. 119(b).

Specification

The disclosure is objected to because of the following informalities: a heading for Detailed Description of the Invention is missing. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-7, 10-12, 16, 17, 23, 25, 32, 34-42 and 50-59 are rejected under 35 U.S.C. 102(b) as being anticipated by Branstetter et al. Branstetter et al teach a processing system and method for an oximeter. An appropriate filter is used to separate the signals into AC and DC components of each of the wavelengths. A control unit, or microprocessor, receives and processed the measured signal. See col. 3, ll. 51-66. The reference discloses a system and method for determining upper and lower envelopes of the measured signal. See col. 4, ll. 50-56. The last four pulse amplitudes are used to calculate the minimum and maximum pulse amplitude. See col. 5, ll. 3-13. A median of half of the sum of the upper and lower values is determined. See col. 6, ll. 45-53.

Regarding claims 50 and 57, it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138 (CCPA 1946).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13, 19, 28 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Branstetter et al as applied to claims 1, 25 above, and further in view of Akselrod et al. Branstetter et al teach a method as recited for claim 1, 25.

Branstetter et al do not teach determining the heart rate using a derivative of Gaussian parameters or spectral filtering. However, Akselrod et al teach using a plethysmograph for determining heart rate. A derivative of a Gaussian window is used in the processing method. A spectral transform apparatus is used in conjunction with the window. See col. 4, ll. 1-22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Branstetter et al with the method of determining heart rate, as taught by Akselrod et al to provide a more complete monitoring method.

Allowable Subject Matter

Claims 2, 8, 9, 14, 15, 26, 27, 43-46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: while disclosing taking the difference between a maximum and a minimum of a signal, the prior art do not teach determining a median of the difference between the maximum and minimum of the signal.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. McCrosky whose telephone number is 703-305-1331. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric F. Winakur can be reached on 703-308-3940. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

DJM
May 5, 2003



ERIC F. WINAKUR
PRIMARY EXAMINER